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CONFIDENTIAL

3 August 1961

MEMORANDUM FOR: C/TSD/EB

ATTENTION : [redacted] 25X1

SUBJECT : Report on Incinerator, [redacted] 25X1

25X1

1. On 28 July 1961 the undersigned inspected the incinerator located in 25X1
a building known as [redacted] Security officers [redacted] helped in checking out the 25X1
equipment and discussed their problems in using it. [redacted] indicated his 25X1
intention of writing a report on his experience in operating the incinerator.

2. The area immediately around the installation was quite dirty, evidence of their problem with blowing ashes while burning. A quantity of ash was found in the incinerator which was said to be the remains of their last burning. When this ash was later removed it was estimated to be more than a bushel in volume. The lower air passages into the firebox were observed to be obstructed by this ash before removal. Inspection of the fly ash screen also showed deposits of a gray-white encrustation blocking many of the screen openings.

3. Normal burning periods at [redacted] are once a week, with some 25X1
10 - 12 mail sacks comprising an average load. Each mail sack contains 10 or 11 burn bags full of paper weighing 6 - 7 lbs. Duration of such a normal burn period was estimated at about 2 hrs. Much of the material lately has been torn 5 - 8 filing cards. Occasional extra burns are conducted, perhaps one additional per month. A quantity of maps and photos had been disposed of recently in efforts to reduce the volume of classified material.

4. There was no wire brush available to clean the screen but most of it came off readily when rubbed by the hands. It was suggested that a wire brush fitted with an angled handle would enable a clean up man to clear the screen more readily when it showed evidence of clogging.

5. Before cleaning out the ash in the firebox the blower was turned on and operation checked with no fire. Much ash was blown out the stack during this check. Operation of the motor and blower were observed during this check and all seemed normal. Motor temperature at start was 32° C and rose to 37° C only at its warmest point. Gaskets around the duct from blower to firebox were tight

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with no leaks. The damper performed well, appearing to open and close fully at the proper lever positions.

6. The manometer was dry and an awkward item to recharge with water for blower pressure readings. Personnel using the incinerator stated a preference for ignoring the device rather than taking the extra time to fill it properly with water at each operation. Heat conditions in this location were such that all the water in the manometer would evaporate during the week between periods of use. Prestone or some other non-volatile liquid was suggested as a possible substitute for water as a manometer filling with the understanding that a different specific gravity would vary the normal pressure readings on the scale.

7. With the manometer charged with water, pressure readings taken during the cold operation check, with the ash remaining in the incinerator were: 1.6 at normal stop, 4.2 wide open, 1.6 at normal stop again. Other readings taken of operating pressure with damper wide open varied around 4.5 and 4.4. These readings were thought to be somewhat lower than they should be and were generally attributed to the 50 cycle motor current. A tachometer was not available to check motor RPM's.

8. The temperature gauge was thought to be out of order because of erratic performance but on adjusting the position of the thermocouple within the stack the needle perfomed well during a trial burn operation. Highest temperature recorded during a trial burn of an estimated 70 pounds of cards was 1100°. All ash was removed from the incinerator before this trial burn and as much of the material clogging the screen as could be readily reached by hand was also removed. The burn proceeded normally with no ash or smoke observed emanating from the stack outside the building. The material was reduced to ashes in about 20 minutes with no difficulty.

9. Discussion with the incinerator operators showed that their procedure was to operate the incinerator at maximum capacity while burning. The boxes would be loaded up level with the door opening, ignited and allowed to burn until the temperature dropped near zero, then the blower would be cut off and another full load thrown in. Operation tended to be either full on or full off with no gradual increase or decrease of the air flow.

10. The major complaint appeared to be that upon cutting off the blower and opening the door much ash and sometimes flame would blast out the door opening at the operator. This was checked during the trial runs, hot and cold, and it was concluded that the blower and damper were not at fault but the stack venting had unfortunately been located toward

the prevailing winds. When a strong gust of wind blew into the stack with the blower not working and the door opened much ash did indeed blow out into the area surrounding the incinerator. No flames were observed to shoot out during the one trial but it could easily occur with the venting so oriented. It was suggested that the stack location be changed to go either straight up through the roof or out the building to leeward, which ever would be more feasible for construction. It was decided to make this change within a week unless there should be some negative indication from Headquarters after submitting this report.

11. In conclusion it is felt that the major problems are of stack orientation and technique of operation. Minor problems of the manometer and thermocouple instrumentation may be readily modified or adjusted in the field. If the manometer is a useful instrument to indicate the relative efficiency of operation of the unit perhaps an instrument with less maintenance (water level) problems could be substituted.

25X1

C/TSD/PTS/SD

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